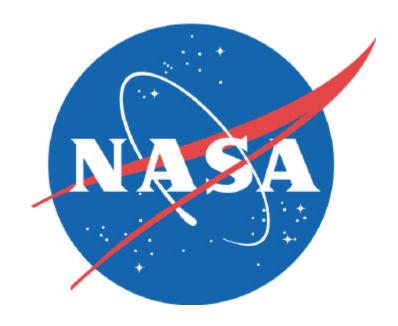
Subject: Document and Data Control



HEADQUARTERS COMMON PROCESS

DOCUMENT AND DATA CONTROL

Approved by:	
Daniel R. Mulville	Date
Associate Deputy Administrator	

DOCUMENT HISTORY LOG

Status (Baseline/ Revision/ Canceled)	Document Revision	Effective Date	Description
Baseline		January 15, 1999	
Revision	А	April 28, 1999	Revisions resulting from DNV Preregistration Audit nonconformances and ISO Project Office comments to improve the clarity, readability, and instructions of the document. The changes do not materially impact the intent or usage of this HCP. For details, see HCP1400-1, Document and Data Control Comment Disposition. Joan Verbeck 3/22/99
Revision	В	March 9, 2000	Revisions were made for the following reasons: 1) to implement the policy of ensuring concurrence on fundamental dependencies with other Headquarters offices (steps 6.4 through 6.8), 2) to modify and mandate Flowchart Symbology (Sec. 2.3 and Sec. 5), 3) to incorporate an ISO Documentation Style Guide (Sec. 2.3 and Appendix D), and 4) to bring the process more in line with the Headquarters process for document review and approval (most of Sec. 6 and the accompanying flowchart). Previous versions of this document relied heavily on use of the ISO Document Management System for online document review and approval. This revised procedure includes a detailed review and approval process but does not define the process based upon the use of the online system for this.
Administrative Change	В	April 25, 2000	Administrative Change to all ISO Level 1, 2, and 3 documents. Per direction from the HQ Quality Council, the NASA Insignia on the cover page of each Level 1, 2, and 3 documents is being updated to remove the Administrator's seal. This update will take place over the next month. This document change will only be documented once in the History Log of HCP1400-1.

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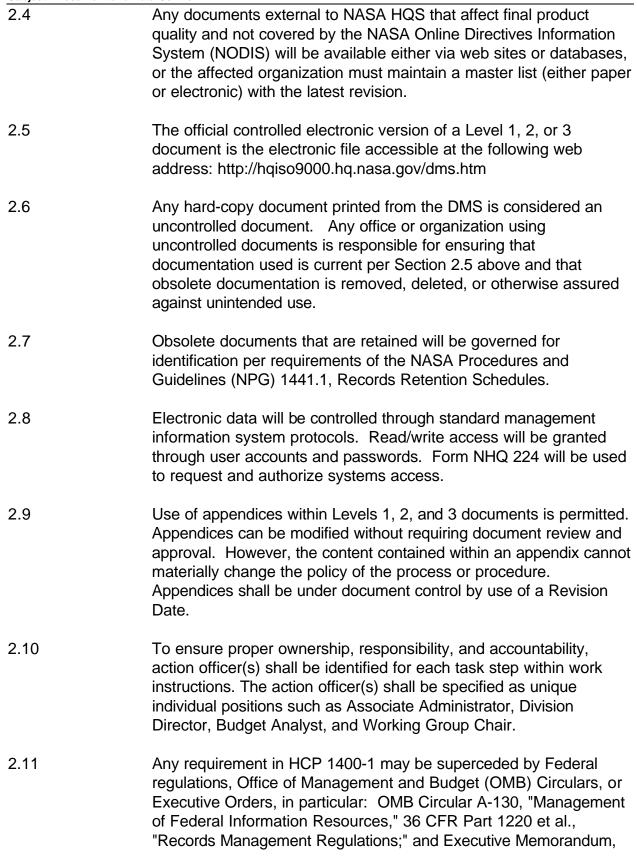
Purpose

The purpose of this Headquarters Common Process (HCP) is to provide a consistent method for reviewing, approving, distributing, revising, tracking, maintaining, and canceling Quality System documentation. This HCP establishes the method for implementing the provisions identified in Section 4.5 of the Headquarters Quality System Manual (QSM).

2 Scope and Applicability

- 2.1 This HCP is applicable to all Quality System documentation and data at Headquarters. It specifically addresses the following documentation: the QSM, HCP's, and Office Work Instructions (OWI) which constitute Quality System documentation at Levels 1, 2, and 3, respectively. All documented procedures/instructions for the control of other types of documentation and data within scope must meet the requirements of the QSM and this document.
- 2.2 The Document Management System (DMS) is the repository for all current Levels 1, 2, and 3 documentation and for obsolete versions of Levels 1, 2, and 3 documentation. All forms relating to Levels 1, 2, or 3 documentation shall be made part of, or an attachment to, the pertinent document and subject to the same review, approval, distribution, tracking, maintenance, and cancellation procedures of the QSM, HCP, or OWI.
- 2.3 The HCP and OWI formats, specified in this HCP, are intended to be used as guidelines for document preparation. All Headquarters HCP's and OWI's shall meet the intent of this guideline but do not need to be in exact conformance with respect to format and structure. The one exception to this is the flowchart symbology legend contained in Section 5. The flowchart symbols must be drawn and used as described in Section 5. If the need exists to use a symbol that is not identified in Section 5, then a legend must be included on the flowchart. See Appendix D for the ISO Documentation Style Sheet. The Style Sheet should be used to assist in preparing HCP's and OWI's. Any revisions to this HCP shall not mandate immediate revisions of other previously approved documents. However, future revisions to these documents shall reflect appropriate guidance as provided from any revisions to the Document and Data Control HCP.

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"Plain Language in Government Writing," (June 1, 1998; detailed guidance in "Plain Language Guidelines" issued by the National Partnership for Reinventing Government).

3 Definitions

3.1 Approved Version. The document approved by the Approving Authority and stored online in the DMS. An external reference document that is maintained in an electronic library, such as NODIS, shall automatically be the official controlled version in effect on the date of use as established by the external document, regardless of the citation in the DMS. 3.2 Approving Authority (AA). The designated management representative with authority to approve Levels 1, 2, or 3 documents. The Approving Authority for Levels 1 and 2 documents is the Associate Deputy Administrator. The Approving Authority for Level 3 documents is the Associate Administrator, Deputy Associate Administrator, or the Functional Office Head of the originating office. 3.3 Controlled Electronic Version. The official version of a Level 1, 2, or 3 document. All electronic versions of documents in DMS are controlled. 3.4 Data. A collection of factual information used as a basis for reasoning, discussion, or calculation. 3.5 Disposition. Refers to actions taken with regard to records that are no longer required or which are referred to so infrequently in the conduct of current business that they are removed from the office and either retired to a Federal Records Center or destroyed. 3.6 Document. An original or official paper relied on as the basis, proof, or support of something. For the purposes of this HCP, documents include hardcopy or electronic media that presents policies, procedures, work instructions, or instructional materials made part, directly or by reference, to the Quality System. All quality documents are simply referred to as documents. 3.7

<u>Document History Log.</u> A table included in each Level 1, 2, and 3

modifications to approved documents. The description will provide a

document containing the effective date and a description of

detailed description of substantive changes. Grammatical changes need only be noted but not detailed. 3.8 Document Manager (DM). The person who administers the Document Management System and maintains the Master List of Levels 1, 2, and 3 documents. The DM also provides a review of Levels 2 and 3 documents for conformance with the Headquarters Quality System. 3.9 External Documents. Those which come from a source other than Levels 1, 2, or 3 quality system documents and are included by reference as part of the Quality System. They include such things as Federal regulations, military specifications, industry standards, Agency-level and Headquarters directives, standards, and specifications. 3.10 Form. An approved Quality System document, which, when executed, becomes a quality record. 3.11 <u>Fundamental Dependency</u>. Work you must have another office perform in order to satisfy the requirements of your OWI or process. Offices with fundamental dependencies are required to demonstrate a meeting of the minds during ISO audits by providing substantiating documentation from an organization with which they have a Fundamental Dependency. 3.12 Guideline. A document or statement in a document that provides information, suggestions, best practices, or other direction and that is recommended, but is usually optional, rather than mandatory. 3.13 <u>Historical Document</u>. A document that is preserved for historical purposes. Obsolete versions of Levels 1, 2, and 3 ISO documents are considered historical documents. 3.14 Interface. An activity within a process that defines an input, output or requirement with another Headquarters organization. 3.15 Level 1 Document. Quality System Manual (QSM). The QSM defines Headquarters policy in applying the ISO standard to Headquarters. See http://hqiso9000.hq.nasa.gov/dms.htm to view this document. 3.16 Level 2 Documents, HCP's. HCP's are Headquarters interorganizational documents that describe common processes

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shared by all Headquarters organizations, which meet requirements for conformance with ISO standards and provide principles and operating procedures (see the QSM). An HCP describes what is to be done, when, where, and by whom. A step-by-step process description will be included with a process flow chart. See http://hqiso9000.hq.nasa.gov/dms.htm to view these documents.

- 3.17

 Level 3 Documents, OWI's. OWI's are quality system documents that provide step-by-step or general instructions stating how to perform specific duties within one or more organizations but do not apply to all Headquarters organizations.

 See http://hqiso9000.hq.nasa.gov/dms.htm to view these documents.
- 3.18 <u>Level 4 Documents, Data</u>. Written or electronically completed or partly completed forms, reports, records, and other information that provide objective evidence that the quality system is followed and is effective.
- 3.19 <u>Limited Applicability</u>. That which has been superseded or is obsolete; user must have documented authority to use superseded/obsolete documents.
- 3.20 <u>Maintaining Documentation</u>. Providing storage, distribution, reproduction, document revisions, replacement of documents with the latest revisions, and disposition of obsolete and/or invalid documents and reference documents for the Master List documentation.
- 3.21 <u>Master List</u>. Controlled roster for Levels 1, 2, and 3 documents that identifies current revision status.

 See http://hqiso9000.hq.nasa.gov/dms.htm to view the Master List.
- 3.22 <u>Obsolete Version</u>. An archived Level 1, 2, or 3 document that has been superseded or canceled. All obsolete versions of approved documents will be available in the DMS with read-only access.
- 3.23 Office of Primary Responsibility (OPR). The office responsible for preparing, submitting for review and approval, and maintaining the accuracy and currency of Levels 1, 2, and 3 documents from baseline release through each revision until cancellation.

Subject. Document and Da	ita Control
3.24	Organization (Org). Generic term used to describe any Headquarters element, as set forth in The NASA Organization and that is part of the Quality System.
3.25	Quality Record. Objective evidence of the fulfillment of Headquarters requirements for quality or the effectiveness of the operation of the Headquarters Quality System.
3.26	Quality System. A process-based management system used to control the quality of an organization's products and services.
3.27	Reference Document. Agency-level, Headquarters, or other external material cited in the Quality System and required to carry out the quality system. The requirements established by approved Reference Documents that are identified in Quality System documents shall be fully applicable within the context and procedures of those documents (e.g., the QSM, HCP's, and OWI's).
3.28	Repository. A centrally accessible location in an organization for storing and controlling documents and data.
3.29	Responsible Organization. A Headquarters entity charged with carrying out any activity or maintaining data related to the Quality System as set forth in Levels 1, 2, or 3 documentation. The Responsible Organization, as distinguished from the Office of Primary Responsibility, may or may not be involved in preparing, submitting, revising, maintaining, or carrying out any other functions with respect to Levels 1, 2, or 3 documentation.
3.30	Retention. The length of time that records and documents are to be kept. See NPG 1441.1, Records Retention Schedule.
3.31	Reviewers. Those offices or individuals tasked with reviewing Levels 1, 2, or 3 documents to ensure accuracy and/or agreement.
3.32	Revision. A change, modification, or newly edited version of a document. The Document Manager will determine whether a change requires a document revision.
3.33	<u>Uncontrolled Copies</u> . Those that are printed from the Master List system or duplications of the signed hard-copy document.

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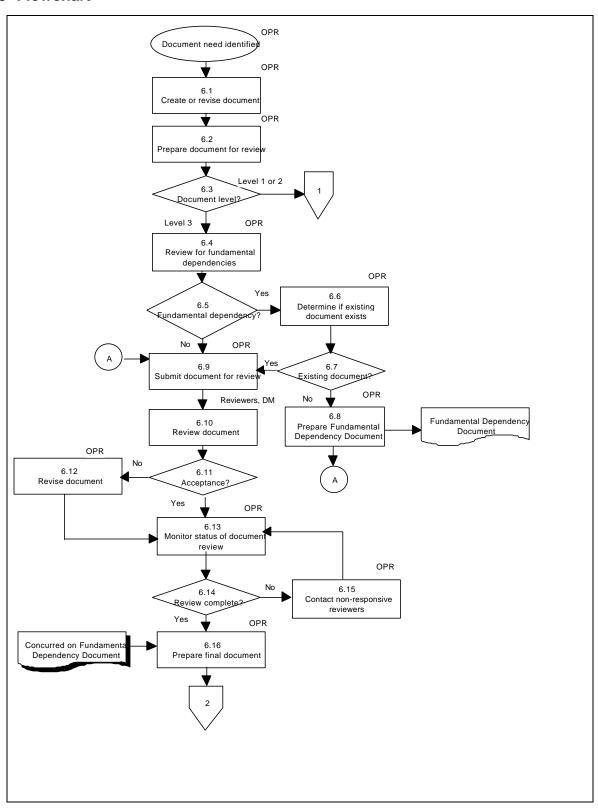
4 References

Documents listed in this section are used as reference materials for performing the processes covered by the Quality System. Since all Levels 1 and 2 documents are applicable to the Quality System, they need not be listed in the Reference Documents section of HCP's and OWI's unless specifically referenced in the procedure (Section 6).

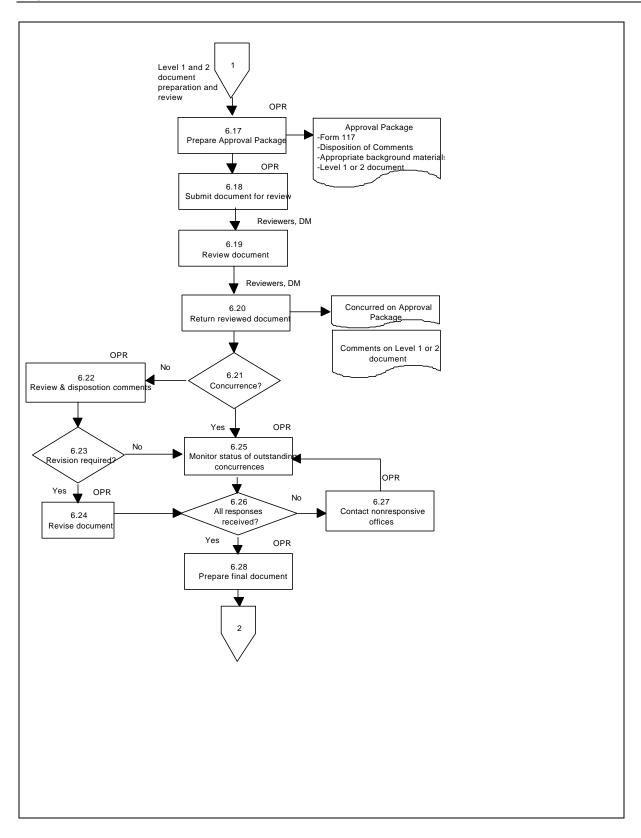
- 4.1 HQSM1200-1, Headquarters Quality System Manual
- 4.2 NPG 1441.1, Records Retention Schedules
- 4.3 NODIS, NASA Online Directives Information System http://nodis.hq.nasa.gov/Nodis1.1/Welcome.html
- 4.4 ANSI/ASQC Q9001:1994, American National Standards, Quality Systems Model for Quality Assurance in Design, Development, Production, Installation, and Servicing

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5 Flowchart

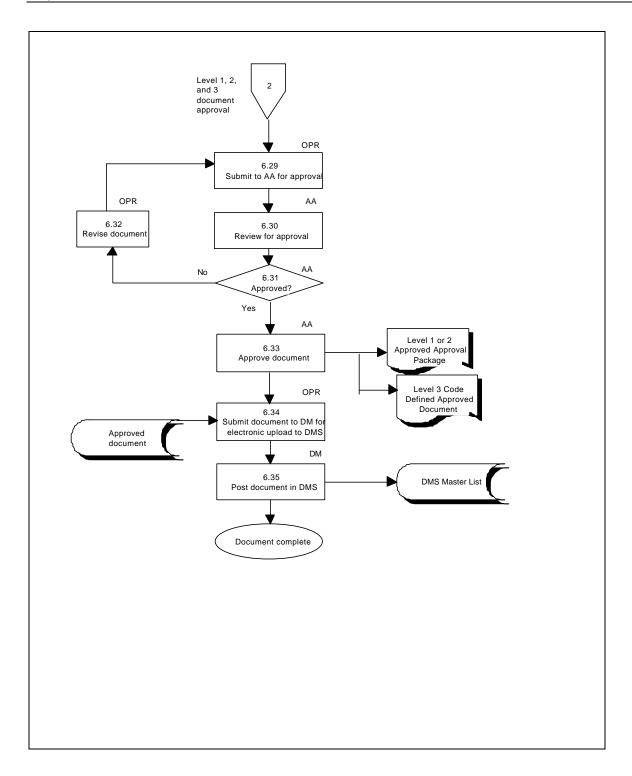


Subject: Document and Data Control



Responsible Office: B/Headquarters ISO 9001 Project Office

Subject: Document and Data Control



Responsible Office: B/Headquarters ISO 9001 Project Office

Subject: Document and Data Control

5 Flowchart (continued)



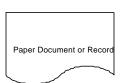
Represents the beginning and end points of flowchart



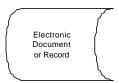
Flow line. Indicates the direction of a process flow.



Represents a decision operation resulting



Represents a nonquality formal input/output in paper format.



Represents a nonquality document or record in electronic format.



Represents nonquality electronic database data.

FLOWCHART SYMBOLOGY LEGEND



Represents exit/entry from another part of the flowchart on the same page. Label sequentially, A, B, C)



Represents continuation of flowchart to another page. Label sequentially (1, 2, 3). Destination page should have a corresponding receiving off-page connector.



Represents any kind of processing function, involving a defined operation or set of operations or steps.



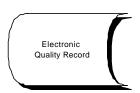
Represents any kind of processing function that occurs outside the scope of the documented processMust be shaded.



Represents a decision operation with multiple options resulting in 3 or more flow lines.



Represents a quality record formal input/output in paper format. Must shadow.



Represents quality records stored in electronic format. Must shadow.



Represents data that may be used to generate a quality record. Must shadow.

Note: The symbology in this legend is the Headquarters standard and must be followed. Any deviations must be documented.

6 Procedure

Step	Action Officer	Action
6.1	OPR	Create or revise a Level 1, Level 2, or Level 3 document. The need for an HCP or OWI does not always necessitate the creation of a new document. If a NASA document, such as an NPG, already exists that defines the process, then this document can be used in lieu of creating a new quality system document. For the creation or revision of a document such as an NPG, see Code J's OWI on Agency Directives Management.
		Prepare draft documents using the standard word processing software currently in use at NASA HQ. See Appendix A for instructions and document templates for HCP's and OWI's. It should be noted that the same format will be used for HCP's and OWI's. Also see the legend in Section 5 for the mandatory flowchart symbology and Appendix D for a Documentation Style Sheet.
		Each Level 1, 2, and 3 document shall have a unique document identifier. See Appendix B for the document-naming convention.
		For revised documents, download the current version from the Document Management System Master List at http://hqiso9000.hq.nasa.gov/dms.htm. Revise the document and update the Document History Log by including a detailed description of substantive changes made. Grammatical changes including spelling and punctuation may be noted but not detailed. Each time the document is reissued, update the document revision level (e.g., Baseline, A, B, C).
6.2	OPR	Prepare the document for the review and approval process. The document level determines the review and approval process. Because Level 1 and 2 documents (HCP's and the QSM) are to be signed by the Associate Deputy Administrator, they are to be reviewed by all Headquarters single-letter codes and two-letter organizations within the Office of the Administrator. Level 2 documents are also to be reviewed by the ISO Project Office to ensure there are no system integration problems with the Headquarters Quality System. Level 3 documents (OWI's) are owned by the originating office and, therefore, are to be signed by the Associate Administrator, Deputy Associate Administrator, or the Functional Office Head of the originating office. Level 3 documents should be reviewed by the following employees: 1) those employees within the originating office who are either responsible for the process or play a role in carrying out the process, 2) the Headquarters ISO DM, and 3) any Headquarters organization the OPR designates to review the process.
		When preparing a document for review, the OPR should designate a review schedule.
6.3	OPR	Is the document a Level 1, 2, or 3 document? If Level 1 or 2 go to step

		6.17. If Level 3, proceed to step 6.4.
6.4	OPR	The document is a Level 3 document (OWI). The document needs to be reviewed to determine if interfaces in the form of fundamental dependencies exist within the procedure with other Headquarters offices. A Fundamental Dependency is work you must have another office perform in order to satisfy the requirements of your OWI or process. An interface is an activity identified in your process that defines an input, output, or requirement with another Headquarters organization. The intent of reviewing for fundamental dependencies is to ensure that all performing organizations are aware of the fundamental dependencies identified in OWI's, understand the requirements, and agree to comply with the form, substance, and schedule of the requirements. Concurrence is limited to a specific Fundamental Dependency and does
		not denote agreement with other interfaces or the process as a whole. By definition, a process is owned by the developing organization, and the developing organization has the authority to approve its internal processes.
		If an approved document is revised, the review shall be performed by the same organizations that performed the original review, unless specifically designated otherwise. Reconcurrence on fundamental dependencies should be reassessed whenever changes to the process, or policy underlying the process, are made and the master list updated. If nothing about the Fundamental Dependency changes, then reconcurrence may not be needed.
		Offices requested to concur on fundamental dependencies may decide the level within the organization, e.g., Associate Administrator, Division Director, or other level, where concurrence needs to occur to ensure commitment to perform the work.
6.5	OPR	Does a Fundamental Dependency exist? If yes, go to step 6.6. If no, go to step 6.9. See Appendix E for guidance on determining fundamental dependencies.
6.6	OPR	A Fundamental Dependency exists. Identify the step(s) in the OWI where Fundamental Dependencies occur. Ensure that the nature of each Fundamental Dependency is clearly stated, including any references or acceptability criteria. A review of existing Headquarters documents shall be performed to determine if a document exists that clearly demonstrates awareness, understanding, and agreement between the two organizations. When a Fundamental Dependency exists, the OPR shall ensure that they are able to produce substantiating documentation from the organization with which the Fundamental Dependency exists. The documentation can take on a number of forms. The following are four examples. 1) There is an existing policy, e.g., NPD, NPG, or direction from the Administrator that clearly states the requirement. By definition, all NPD's/NPG's need concurrence from

Subject:	Document and Data Conti	rol
		regarding a Fundamental Dependency, then the requirement for concurrence has been met. 2) Concurrence is built into the process and is documented and controlled as a quality record. For example, if the process has a Fundamental Dependency with another code, but the code's concurrence is one of the explicit steps in the process, then the requirement for the Fundamental Dependency concurrence has been met. This would also include review and approval of Fundamental Dependencies that are built into the process, i.e., if the process includes another organization reviewing and approving something as part of the process, then the requirement for concurrence has been met as part of the process. 3) There is some other type of document, e.g., memo, which indicates awareness, understanding and agreement. 4) A separate concurrence to an OWI by the performing organization. Only when there is no existing documentation that indicates awareness, understanding, and agreement with a Fundamental Dependency identified in the process, is the organization required to obtain a separate concurrence on the Fundamental Dependency.
6.7	OPR	Is there an existing document that demonstrates awareness, understanding, and agreement between the two organizations? If yes, proceed to 6.9. If no, proceed to 6.8.
6.8	OPR	Prepare Fundamental Dependency documentation. See Appendix F for guidance on preparing this documentation. This documentation should identify any form, substance, acceptance criteria, and schedule considerations necessary to meet work requirements. When a separate concurrence is obtained where one did not previously exist, the record of the concurrence shall be controlled in accordance with NPG 1441.1, Schedule 1, Item 72B. These records will be quality records for purposes of demonstrating conformance to this HCP (Document and Data Control). All other objective evidence of concurrence shall be controlled in accordance with the appropriate subject classification as detailed in NPG 1441.1.
6.9	OPR	Submit document for review based on review criteria specified in 6.2 above. The review package should consist of the Fundamental Dependency Document prepared in step 6.8 if a Fundamental Dependency exists and is not documented elsewhere, along with the OWI. Before the document is submitted for review, check the presubmission checklist (Appendix C) to ensure completeness of the document.
6.10	Reviewers, DM	The reviewers read the process for conformance to the standard, acceptance of the process, applicability of referenced documents, and existence of fundamental dependencies. The Document Manager also provides a review for conformance with the HQ Quality System.
6.11	Reviewers, DM	Does the reviewer concur and accept the process? If yes, go to step 6.13. If no, go to step 6.12. It is important to note that some document reviewers only need to indicate acceptance of the process and do not

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		need to formally concur. When a Fundamental Dependency exists, the reviewer involved in the Fundamental Dependency needs to actually concur on the Fundamental Dependency Document and return this document to the OPR.
6.12	OPR	The reviewer had a problem with the process and did not accept and/or concur. The OPR should assess the need to revise the document based on the reviewer's comments.
6.13	OPR	Monitor status of document review to ensure that review is complete.
6.14	OPR	Is review complete? If yes, proceed to 6.16. If no, go to 6.15.
6.15	OPR	Contact nonresponsive document reviewers to determine status of review. The OPR should discuss a new review schedule.
6.16	OPR	Prepare final document for approval. Level 3 documents are owned by the originating office and are, therefore, subject to the internal processes of that office with respect to preparation of the final document. Go to step 6.29 for the document approval process.
6.17	OPR	Document is a Level 1 or 2 document. Prepare approval package as required by the Headquarters Correspondence Management Office. Approval Package consists of 1) the Level 1 or 2 document, 2) NHQ Form 117, Action Document Summary Sheet, 3) Comment Disposition Document, and 4) background materials.
6.18	OPR	Submit document for review. Because the document is either a Level 1 or 2 document, the document shall be reviewed by all Headquarters single-letter codes and two-letter organizations within the Office of the Administrator. Level 2 documents are to be reviewed by the ISO Project Office to ensure there are no system integration problems with the HQ Quality System. The document is also to be forwarded to the ISO DM for review.
6.19	Reviewers, DM	Review document. Document is reviewed for conformance to the ISO standard, acceptance of the process, and applicability of referenced documents. The DM and ISO Project Office provides a review for conformance and system integration with the HQ Quality System.
6.20	Reviewers, DM	Return reviewed document. The returned document can be in the form of concurrence, concurrence with comments, or nonconcurrence with comments. Comments should be specific enough that the OPR understands the issues or problems.
6.21	Reviewers, DM	Did the document reviewers concur on the document. If yes, go to step 6.25. If concurrence was not obtained, go to step 6.22.
6.22	OPR	The OPR reviews and dispositions the comments received. Some comments may require modifications to the document, whereas others may not. Update the Disposition of Comments Document in the approval package.

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6.23	OPR	Is a revision to the document required as a result of the comments received in step 6.20? If no, proceed to 6.25. If yes, proceed to 6.24.
6.24	OPR	Revise document and, if necessary, update the Document History Log.
6.25	OPR	Monitor status of outstanding concurrences.
6.26	OPR	Have all responses been received? If yes, proceed to 6.28. If no, proceed to 6.27.
6.27	OPR	The OPR should contact nonresponsive offices to determine whether they will have comments or intend to concur.
6.28	OPR	Prepare final document for approval. Document is ready for approval when all comments have been dispositioned and/or concurrence has been received. Note: A document can be submitted for approval even when concurrence has not been obtained provided that an explanation is provided in the Disposition of Comments Document.
6.29	OPR	Levels 1, 2, and 3 documents. Submit to approving authority for approval.
6.30	AA	Review document for acceptance of the process.
6.31	AA	Is document approved? If yes, go to step 6.33. If no, go to step 6.32.
6.32	OPR	The approving authority did not approve the document. Take appropriate action to revise the document per the comments/concerns received from the approving authority.
6.33	OPR	The approving authority has approved the process. The output of the step is the approved approval package (for Level 1 and 2 documents) and for Level 3 documents the output is the Level 3 code-defined approval package.
6.34	OPR	The OPR shall submit the approved document to the DM for electronic upload to the Master List. The approved document shall contain the effective date and an indication within the document that it was approved by the approving authority.
6.35	DM	Post document to the Master List in the Document Management System. It should be noted that the DM can request that changes be made to the document so it meets the requirements of this HCP. Changes of this nature would be format related rather than content related. Because this type of change would not materially change the process or policies within the process, the document can be posted on the Master List with a new effective date but under the same Revision level.

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7. Quality Records

This section is used to identify quality records, record owners, their location, media, schedule and item number, and retention/disposition of records that are created and maintained. It is important to note that not all documents created as a result of implementing a process are quality records. The OPR is to identify those quality records that result from key steps in the process. When listing Quality Records in Section 7, attention shall be paid to ensure that the records cited in Sections 5 and 6 are identified in the same context as those listed in Section 7.

NPG 1441.1, Records Retention Schedule, is the official procedure governing the retention, retirement, and destruction of Agency records. These schedules shall be reviewed to determine into which item and series your records best fit. Once a best fit is determined, the schedule number, item number, and minimum retention shall be cited in a table similar to the one below.

It is recommended that the record owner and location sections of the table below contain information that will generally guide employees to the record but not be so detailed that an office reorganization or relocation will necessitate the update of this table.

Record Media refers to the official record and whether it is in electronic or hard copy format. The official file copy is either the electronic copy or the hard copy but not both.

		Glocal Gring Gop	00	oop, sacino	
RECORD IDENTIFICATI ON	RECORDO WNER	LOCATION	RECORD MEDIA: ELECTRONIC OR HARD COPY	SCHEDULE NUMBER AND ITEM NUMBER	RETENTION/DISPOSITION
Concurred on	OWI OPR	OPR Files	Hard	Schedule 1,	Retire to FRC 5 years after cancellation or
Fundamental Dependency Document		G		Item 72B	when superseded.
Level 1 or 2 Approved Approval Package	Code R	Code R Admin Office Files	Hard	Schedule 1; Item 72.B	Retire to FRC 5 years after cancellation or when superseded.
Level 3 Code Defined Approved Document	OWI OPR	OPR Files	Hard	Schedule 1, Item 72.B	Retain to FRC 5 years after cancellation or when superseded.
Master List	Code R	http://hqiso9000.hq. nasa.gov	Electronic	Schedule 1; Item 72.B	Retire to FRC 5 years after cancellation or when superseded.

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APPENDIX A - Headquarters Common Process (HCP) or Office Work Instructions (OWI) Template

Header

Page 1
Unique Document Number
Effective Date mm/dd/yy

Responsible Office: [Enter name of office here] **Subject: [Enter Document Subject]**

Document Subject

Document History Log

Status (Baseline/ Revision/ Canceled)	Document Revision	Effective Date	Description
Baseline		*	#

^{*} Added after the Approving Authority approves.

----- Page Break-----

- 1 Purpose
- 2 Scope and Applicability
- 3 **Definitions** (list each word and the corresponding definition)
- 4 **References** (list each reference document)

Identify those documents that are used as references for carrying out the processes covered by the Quality System. Since all Levels 1 and 2 documents are applicable to the Quality System, they need not be listed in the Reference Documents section of HCP's and OWI's unless specifically referenced in the procedure (Section 6).

The requirements established by approved Reference Documents that are identified in Quality System documents shall be fully applicable within the context and procedures of those documents (e.g., the QSM, HCP's, and HOWI's).

[#] Information on changes must be specific enough to make clear what the revision means. Identification of pages changed is insufficient

Page 21 of 26 HCP1400-1B Effective Date: April 25, 2000

Responsible Office: B/Headquarters ISO 9001 Project Office

Subject: Document and Data Control

5 Flowchart (chart)

6 Procedure

Procedures shall correspond to the flowchart in Section 5. To ensure ownership and responsibility, action officer(s) shall be identified for each step within work instructions. The action officer(s) shall be specified as unique individual positions such as Associate Administrator, Division Director, Budget Analyst or Working Group Chair.

7 Quality Records (complete table below)

RECORD IDENTIFICATI ON	RECORD OWNER	LOCATION	RECORD MEDIA: ELECTRONIC OR HARD COPY	SCHEDULE NUMBER AND ITEM NUMBER	RETENTION/DISPOSITION

Appendices (include all)

Footer

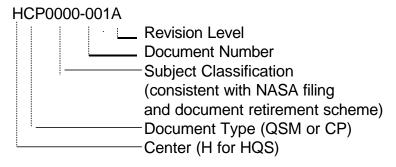
CHECK THE MASTER LIST at http://hqiso9000.hq.nasa.gov TO VERIFY THAT THIS IS THE CORRECT VERSION BEFORE USE

Subject: Document and Data Control

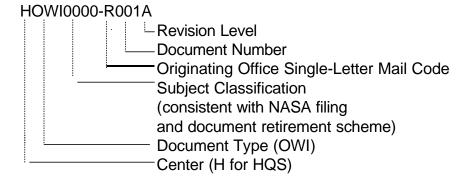
APPENDIX B - Quality System Controlled Document Naming Convention

A slightly different naming convention will be used for HCP's and OWI's. The only difference is that OWI's will include a mail code identifier. Since the HCP's span several codes, a single-letter mail code cannot be specified. The following are sample HCP and OWI document names.

HCP and QSM Sample Document Name



OWI Sample Document Name



Responsible Office: B/Headquarters ISO 9001 Project Office

Subject: Document and Data Control

APPENDIX C - Presubmission Checklist

- 1. Identify NASA Policy Directives (NPD), NASA Program Guidelines (NPG's), NASA regulations, standards, or other reference documentation.
- 2. Identify those forms, reports, and other Quality Records that are the result of key steps in the process. Include this information in Section 7, Quality Records Table.
- 3. Search the ISO documentation Master List and compare your document against existing documents. If other organizations have similar procedures, a determination may need to be made among these offices and the ISO Project Office concerning whether a procedure should be documented as a group of OWI's or as an HCP. If it is determined early in the process that an HCP should be developed, it may streamline the document system and reduce work.
- 4. Prepare a flowchart of all processes or procedures including inputs and outputs.
- 5. Review the draft against the Headquarters Quality System Manual. Assess the draft procedure to ensure that it meets the requirements of the QSM.
- 6. Check the ISO Corrective Action System for outstanding issues and nonconformances that must be addressed. See http://hqiso9000.hq.nasa.gov/cas.htm
- 7. Check with your office's Audit Liaison Representative for ISO system audit issues or recommendations.
- 8. Have the employee(s) who perform any part of the procedure review it. For HCP's, employees from all affected offices shall review.
- 9. Ensure a top-level review within the originating office. Each affected office should review draft HCP's before entering the draft into the Document Management System.
- 10. Review to ensure that the document meets the intent of the guidelines as specified in this HCP.
- 11. Check for spelling and grammar.
- 12. Update the history log for revisions of approved documents.
- 13. Review OWI for fundamental dependencies with other Headquarters organizations and ensure concurrence on the interface exists or obtain concurrence.
- 14. Do a cross-check between Sections 5, 6, and 7 to ensure that Quality Records are consistently identified.

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Appendix D: ISO Documentation Style Sheet

This style sheet contains recommendations to help ensure a standard approach for preparing HQS Common Procedures and Office Work Instructions. This style sheet serves as supporting documentation to HCP1400-1, Document and Data Control, but it is not part of HCP1400-1.

Document Header.

- 1. The document title should be entered in the header in the following format: HOWI7400-S001Baseline (Note placement of "-" and no spaces. For a subsequent version, the word "Baseline" would be replaced with A, B, C).
- 2. Page numbering should be included in the header and should be in the following format: Page x of x. It is best to set this up in Word using dynamic update of page numbering rather than hard coding in the page numbers.

Section 4, References.

- 1. Any reference documents in the OWI should not contain revision designation (e.g., NPG 7120.5 not 7120.5A).
- A hot link should be included with the reference document title when reference documents are available
 via the Internet. Hot links should point to the official document repository such as NODIS and the ISO
 DMS for internal documents. For external reference documents, the hot link should point to the agency
 that created the documents.

Section 5, Flowchart.

- 1. Process steps and decision boxes are numbered 6.n to correspond with the narrative in Section 6.
- 2. The ending oval should not have outputs.
- 3. Decision boxes should not have inputs or outputs.
- 4. Decision boxes should end with a question mark.
- 5. Each process step should begin with a verb.
- 6. Flows should be prepared in portrait orientation with inputs to process steps on the left of the box and outputs on the right, unless necessitated by complexity of the flowchart.
- 7. It is not necessary to show output of 6.n as input to the next step. If showing this level of granularity is needed for clarity, then state the input in Section 6.
- 8. Process steps resulting from branches should be shown on the same page as the decision or on separate pages connected by off-page connectors.
- 9. A single process block can contain multiple action officers (e.g., a process block may be performed by multiple positions such as AA/DM).
- 10. Action officers should be shown in the flowchart outside and adjacent to the process box. If acronyms are used on the flowchart, you should define them in one of the following ways: a) in the text of the OWI, b) in Section 4 of the OWI, or c) in a legend on the flowchart.

Section 7, Quality Records.

- 1. Quality records should be listed in Section 7 in the order in which they appear in the flowchart.
- 2. The title of the quality record should be the same as that shown on the flowchart, described in Section 6, listed in Section 7, and retrieved to show the auditor.

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Appendix E: Guidance for Determining Fundamental Dependencies

An interface is defined as an activity called out in your process that defines an input, output or work requirement with another Headquarters organization. A subset of interfaces is the fundamental dependencies between offices. A Fundamental Dependency is defined as work you must have another office perform to satisfy the requirements of your OWI or process.

The following examples are presented to help Headquarters offices determine if a Fundamental Dependency concurrence is required. They are intended to be examples only, not a portrayal of actual fundamental dependencies.

Example 1 – Code B has a budget formulation process which requires the Strategic Enterprise codes to provide them with inputs in a specified format.

Strategic Enterprise concurrence required? Yes, the Strategic Enterprise inputs are a Fundamental Dependency. Code B cannot complete their budget formulation process without the Strategic Enterprise codes performing work and providing the input. Therefore, a separate concurrence would be required if no documentation exists to reflect concurrence, or concurrence is not part of the process.

Example 2 – Code R has a budget formulation process which has as an input (interface), from the Code B POP call.

Code B Concurrence required? No, the Code R input is not a Fundamental Dependency. The Code R process only points to the fact that they receive a POP call from Code B. Code R is not requiring Code B to do work to complete their internal process. They are merely recognizing the fact that Code B provides them with a requirement. Therefore, no concurrence is required.

Example 3 – Code R completes their budget formulation process and provides an output to Code B, in terms of the Code R input to the POP.

Code B concurrence required? No, the Code R output is not a Fundamental Dependency. The Code R budget process is complete at this point. Code R is not requiring Code B to do work. Code R is merely answering the Code B POP as required by Code B, and concurred upon (in the earlier example) by Code R.

Example 4 – Code U formulates the details of an international agreement which is approved by Code I. The Code U OWI states that the official quality record is kept in Code I.

Concurrence by Code I required? Yes, the quality record for the Code U process is a Fundamental Dependency. Code U is depending on Code I to keep the official quality record consistent with existing NASA policy. Therefore, a separate concurrence would be required if no documentation exists to reflect concurrence, or concurrence is not part of the process.

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	Αŗ	opendix F	: Samp	ole Docume	entation fo	or Obtaining	Concurrence	on Fur	ndamental	Depend	dencies
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TO: (Offices in which fundamental dependencies' concurrence is requested)

FROM: (Office requesting fundamental dependencies' concurrence)

SUBJECT: Concurrence of Code HOWIxxxx-xxxx fundamental dependencies

Enclosure 1 is a copy of HOWxxxx-xxxx. Enclosure 2 provides a table which lists the fundamental dependencies with your office contained in HOWlxxxx-xxxx, and requests your concurrence. Please return your office's concurrence reflecting a full understanding and agreement to support the requirement within 10 business days of the date of this memo. Questions regarding HOWlxxxx-xxxx should be directed to (contact name) at (telephone number).

2 enclosures

OWI Fundamental Dependency Table

HOWI9999-V9999 6.1 B,C,E,F, JK,L,M,F S, U, Y,Z	HQ panization Where and amental pendency (ies)
Union	, PMC,

Concurrence:

I am aware of the fundamental dependencies contained in HOWIxxxx-xxxx as detailed in the table above. I understand the requirements of the fundamental dependencies identified and agree to comply with the form, substance, and schedule of the requirements.

<u>Code</u>	<u>Name</u>	<u>Title</u>	<u>Signature</u>	<u>Date</u>	